

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of: Matti PUPUTTI	Confirmation No.: 9503
Application No.: 09/989,301	Group Art Unit: 2421
Filed: November 19, 2001	Examiner: Chowdhury, Sumaiya A

For: METHOD AND APPARATUS FOR DYNAMIC PROVISIONING OF IP-  
BASED SERVICES IN A DVB NETWORK

Commissioner for Patents  
Alexandria, VA 22313-1450

**APPEAL BRIEF**

Dear Sir:

This Appeal Brief is submitted in support of the Notice of Appeal dated December 3, 2009.

**I. REAL PARTY IN INTEREST**

The real party in interest is Nokia Corporation, a corporation organized under the laws of Finland and having a place of business at Keilalahdentie 4, FIN-02150 Espoo, Finland. The above referenced patent application is assigned to Nokia Corporation.

**II. RELATED APPEALS AND INTERFERENCES**

Appellant is unaware of any related appeals and interferences.

### **III. STATUS OF THE CLAIMS**

Claims 57-76 are pending in this appeal, in which claims 1-56 have previously been canceled. No claim is allowed. This appeal is therefore taken from the final rejection of claims 57-76 on August 3, 2009.

### **IV. STATUS OF AMENDMENTS**

All amendments have been entered.

### **V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

The claimed invention addresses problems associated with dynamically providing one or more IP-based services over a digital video broadcasting (DVB) network using a computer network or a wireless network. A service having a control channel, such as an Internet Protocol control channel, is transmitted over a first transport stream to one or more end user terminals in accordance with a first configuration parameter of the service, as maintained by the end user terminals. The first configuration parameter identifies the control channel with the first transport stream. The network then generates and/or transmits a second configuration parameter to the end user without receiving interactive information from the end user terminal. The second configuration parameter may include addressing and interface information and a program identifier that identifies the control channel with either a second transport stream or a second portion of the first transport stream. The network then may transmit the service to the end user terminals over the second transport stream. The second transport stream may be selected based on a data size of the service and an available bandwidth of the first and second transport streams.

Independent claim 57 recites:

57. A method, comprising:

transmitting a network information table (See, e.g., Specification, page 8, line 20; Fig. 2, table 20), wherein the network information table contains a linkage to a control channel (See, e.g., Specification, page 8, line 22-page 9, line 6; Fig. 2, channel 22); and

transmitting the control channel, wherein the control channel contains access information corresponding to one or more internet protocol based services (See, e.g., Specification, page 7, lines 21-23; page 9, lines 2-6; Fig. 1, channel transmitted over transport streams 18).

Independent claim 62 recites:

62. A method, comprising:

receiving a network information table (See, e.g., Specification, page 8, line 20; Fig. 2, table 20), wherein the network information table contains a linkage to a control channel (See, e.g., Specification, page 8, line 22-page 9, line 6; Fig. 2, channel 22); and

receiving the control channel, wherein the control channel contains access information corresponding to one or more internet protocol based services (See, e.g., Specification, page 5, line 19; page 7, lines 21-23; page 9, lines 2-6; Fig. 1, channel transmitted over transport streams 18).

Independent claim 67 recites:

67. An apparatus, comprising:

a transmitter (See, e.g., Specification, page 7, lines 14-16; page 9, lines 13-17; Fig. 1, end user terminals 16 contain transmitters; Fig. 3, step 32), wherein the transmitter is configured to:

transmit a network information table (See, e.g., Specification, page 8, line 20; Fig. 2, table 20), wherein the network information table contains a linkage to a control channel (See, e.g., Specification, page 8, line 22-page 9, line 6; Fig. 2, channel 22); and

transmit the control channel, wherein the control channel contains access information corresponding to one or more internet protocol based services (See, e.g., Specification, page 7, lines 21-23; page 9, lines 2-6; Fig. 1, channel transmitted over transport streams 18).

Independent claim 72 recites:

72. An apparatus, comprising:

a receiver, wherein the receiver is configured to:

receive a network information table (See, e.g., Specification, page 8, line 20; Fig. 2, table 20), wherein the network information table contains a linkage to a control channel (See, e.g., Specification, page 8, line 22-page 9, line 6; Fig. 2, channel 22); and

receive the control channel, wherein the control channel contains access information corresponding to one or more internet protocol based services (See, e.g., Specification, page 7, lines 21-23; page 9, lines 2-6; Fig. 1, channel transmitted over transport streams 18).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 57-76 were rejected for obviousness under 35 U.S.C. §103(a) based on *Kessler* (US 6,741,288) in view of *Levitan* (US 2002/0147769).

**VII. ARGUMENT**

**CLAIMS 57-76 ARE NOT RENDERED OBVIOUS BY KESSLER AND LEVITAN BECAUSE THE COMBINATION OF REFERENCES FAILS TO DISCLOSE OR SUGGEST A NETWORK INFORMATION TABLE CONTAINING A LINKAGE TO A CONTROL CHANNEL, WHICH, IN TURN, CONTAINS ACCESS INFORMATION CORRESPONDING TO ONE OR MORE INTERNET PROTOCOL BASED SERVICES.**

The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention under any statutory provision always rests upon the Examiner. *In re Mayne*, 104 F.3d 1339, 41 USPQ2d 1451 (Fed. Cir. 1997); *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995); *In re Bell*, 991 F.2d 781, 26 USPQ2d 1529 (Fed. Cir. 1993); *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In rejecting a claim under 35 U.S.C. § 103, the Examiner is required to provide a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 357 F.2d 385, 148 USPQ 721 (CCPA 1966); *In re Freed*, 425 F.2d 785, 165 USPQ 570 (CCPA 1970).

Independent claims 57 and 67 recite, *inter alia*, “transmitting [or transmit] **a network information table**, wherein the network information table contains **a linkage to a control channel**...the control channel contains **access information corresponding to one or more internet protocol based services**.” Independent claims 62 and 72 recite, *inter alia*, “receiving [or receive] **a network information table**, wherein the network information table contains **a linkage to a control channel**...the control channel contains **access information corresponding to one or more internet protocol based services**.”

The emphasized portions of the claim language are not disclosed or suggested by the applied references. *Kessler*, the primary reference, discloses a program and specific information protocol (SPIP) format for enabling **terrestrial broadcast and cable broadcast streams** to be

appended with extended sets of data carried in one or more tables (master guide table, virtual channel table, event information table, extended text table, system timetable, and a rating region table (col. 1, lines 41-46; col. 5, lines 37-46). As clearly understood by skilled artisans, these PSIP tables disclosed in *Kessler* provide information about **terrestrial broadcast and cable broadcast streams**. This is in stark contrast to the claimed network information table (NIT), which includes tuning information for accessing Internet protocol based services, rather than broadcast services with which *Kessler* is concerned. *Kessler* is devoid of any teaching or suggestion of Internet protocol based services, which is not surprising, given that the PSIP format of *Kessler* is utilized for terrestrial broadcast and cable broadcast streams, not Internet protocol based services.

The Examiner cited col. 4, lines 5-6, and col. 3, lines 32-42, of *Kessler* to show that a receiver may be connected to an Internet network. The Examiner asserted that from this disclosure, “it may be inferred that Internet protocol based services are supported and provided by *Kessler*’s system.” Appellant respectfully disagrees.

The mere fact that the DTV control module 18 in Fig. 1 of *Kessler* may optionally be connected to the Internet network does not, in any way, teach or suggest that *Kessler*’s system is concerned with accessing internet protocol based services. As disclosed in *Kessler*, from col. 1, line 43 through col. 2, line 6, the control module 18 may issue commands, such as a PID, to select a desired program, it may be connected to a RAM 26 or a program memory 30 to receive instructions for tasks to be executed by the control module 18, or it may be connected to a user command module 36 for receiving commands from a user regarding selection and display of desired programs. Thus, when *Kessler* then recites that the control module 18 “may also be connected to a network such as the Internet,” after the recitation of other connections for the

purpose of receiving commands from various devices, the only reasonable assumption is that the Internet is an alternative way for the command module 18 to receive commands, such as to select a desired program. However, there is absolutely no suggestion that the connection to the Internet is for the purpose of **accessing internet protocol based services**, as opposed to the terrestrial broadcast and cable broadcast streams.

The Examiner recognized that *Kessler* does not explicitly teach accessing Internet protocol based services, relying on *Levitan* for such a teaching. However, *Levitan*, at best, merely teaches that Internet protocol based services, *per se*, were known (a fact which Appellant does not deny). There is no evidence of record that would have led the skilled artisan to modify *Kessler* in any manner to provide access to such internet protocol based services, especially in view of the fact that *Kessler* discloses only **terrestrial broadcast and cable broadcast streams**. Accordingly, nothing would have suggested to the artisan modifying *Kessler* to provide for **accessing internet protocol based services**, let alone providing such services in the manner claims, *viz.*, with a network information table containing “**a linkage to a control channel...the control channel contains access information corresponding to one or more internet protocol based services.**” The teachings of *Levitan* are not germane to the **terrestrial broadcast and cable broadcast streams** of *Kessler* and, therefore, the combination of *Kessler* and *Levitan* is improper, such combination being made only through the exercise of impermissible hindsight, which is not a proper basis for concluding obviousness, within the meaning of 35 U.S.C. §103(a). *In re Shaffer*, 108 USPQ 329 (CCPA 1956).

Moreover, the claimed feature of a “linkage to a control channel” is not taught by the applied references. The linkage disclosed by *Kessler*, the reference allegedly disclosing the claimed feature, only enables control module 18 to acquire control structure 46 from memory 26

to enable demultiplexer 16 to receive the desired broadcast program, while ignoring other received programs. Such a teaching has no relevance to “a linkage to a control channel...the control channel contains access information corresponding to one or more internet protocol based services,” as claimed. Not only are the linkages in *Kessler* different from those claimed, but the linkage in *Kessler* provides for a filtering function in ignoring those programs not selected, while the instant claims provide for “access information” corresponding to IP based services.

Accordingly, since neither *Kessler* nor *Levitan*, nor any combination thereof, discloses or suggests “transmitting [or transmit] **a network information table**, wherein the network information table contains **a linkage to a control channel**...the control channel contains **access information corresponding to one or more internet protocol based services**,” or the like, no *prima facie* case of obviousness has been established by the Examiner. Therefore, reversal, by the Honorable Board, of the Examiner’s rejection of claims 57-76 under 35 U.S.C. §103(a) is respectfully solicited.

#### **VIII. CONCLUSION AND PRAYER FOR RELIEF**

For the foregoing reasons, Appellant requests the Honorable Board to reverse each of the Examiner’s rejections.



To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 504213 and please credit any excess fees to such deposit account.

Respectfully Submitted,

DITTHAVONG MORI & STEINER, P.C.

July 23, 2010

Date

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**IX. CLAIMS APPENDIX**

1-56. (Canceled)

57. A method, comprising:

transmitting a network information table, wherein the network information table contains a linkage to a control channel; and

transmitting the control channel, wherein the control channel contains access information corresponding to one or more internet protocol based services.

58. The method of claim 57, wherein the access information comprises network address information.

59. The method of claim 57, wherein the control channel is transmitted via a transport stream.

60. The method of claim 59, wherein the control channel contains access information corresponding to one or more internet protocol based services of the transport stream.

61. The method of claim 57, wherein the control channel is transmitted via a program specific information layer of a transport stream.

62. A method, comprising:

receiving a network information table, wherein the network information table contains a linkage to a control channel; and

receiving the control channel, wherein the control channel contains access information corresponding to one or more internet protocol based services.

63. The method of claim 62, wherein the access information comprises network address information.

64. The method of claim 62, wherein the control channel is transmitted via a transport stream.

65. The method of claim 64, wherein the control channel contains access information corresponding to one or more internet protocol based services of the transport stream.

66. The method of claim 62, wherein the control channel is transmitted via a program specific information layer of a transport stream.

67. An apparatus, comprising:

a transmitter, wherein the transmitter is configured to:

transmit a network information table, wherein the network information table contains a linkage to a control channel; and

transmit the control channel, wherein the control channel contains access information corresponding to one or more internet protocol based services.

68. The apparatus of claim 67, wherein the access information comprises network address information.

69. The apparatus of claim 67, wherein the control channel is transmitted via a transport stream.

70. The apparatus of claim 69, wherein the control channel contains access information corresponding to one or more internet protocol based services of the transport stream.

71. The apparatus of claim 67, wherein the control channel is transmitted via a program specific information layer of a transport stream.

72. An apparatus, comprising:

a receiver, wherein the receiver is configured to:

receive a network information table, wherein the network information table contains a linkage

to a control channel; and

receive the control channel, wherein the control channel contains access information

corresponding to one or more internet protocol based services.

73. The apparatus of claim 72, wherein the access information comprises network address information.

74. The apparatus of claim 72, wherein the control channel is transmitted via a transport stream.

75. The apparatus of claim 74, wherein the control channel contains access information corresponding to one or more internet protocol based services of the transport stream.

76. The apparatus of claim 72, wherein the control channel is transmitted via a program specific information layer of a transport stream.

**X. EVIDENCE APPENDIX**

Appellant is unaware of any evidence that is required to be submitted in the present Evidence Appendix.

**XI. RELATED PROCEEDINGS APPENDIX**

Appellant is unaware of any related proceedings that are required to be submitted in the present Related Proceedings Appendix.